Abstract

Machine learning is a concerned with the design and development of algorithms. Machine learning is a programming approach to achieve optimization. Classification is the prediction approach in data mining techniques. Decision tree algorithm is the most common classifier to build tree because of it is easier to implement and understand. Attribute selection is a concept by which to select more significant attributes in the given datasets. This Paper proposed a novel hybrid approach with a combination of rough set and Random Forest algorithm called Rough Set based Random Forest Classifier (RSRF Classifier) which is used to deal with uncertainties, vagueness, and ambiguity associated with datasets. In this approach, the selection of significant attributes based on rough set theory as an input to Random Forest classifier for constructing the decision tree which is more efficient and scalable approach as compare to related work for lymph disease diagnosis studies.
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**Index Terms**

Computer Science

Algorithms

**Keywords**

Machine learning, Rough Set, Decision Tree, Random Forest Classifier, Lymph disease